Patent

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RESPONSE TO SECOND NOTICE OF NON-COMPLIANT APPEAL BRIEF

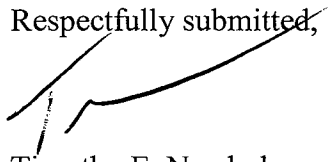
Dear Madam/Sir:

In response to the Notice mailed February 25, 2008, please find attached hereto a revised version of the Appeal Brief section titled "Summary of Claimed Subject Matter." As requested in the Notice, Appellant has revised the summary section of the Appeal Brief to refer to page and line numbers of the application rather than the more segregated paragraph numbers found in the application as published. In accordance with MPEP §1205.03(B), only that portion of the Appeal Brief titled "Summary of Claimed Subject Matter" is included herewith. Should the Office have any further problems with passage

of this matter to the Board, in view of the revisions section provided herewith and the previous revisions filed December 3, 2007, the Office is cordially invited to telephone the undersigned to avoid any further piecemeal treatment of this Appeal Brief which was originally filed October 11, 2007.

In accordance with 37 C.F.R. §1.136, Appellant hereby provides a general authorization to treat this and any future reply requiring an extension of time as incorporating a request therefore. The Office is further authorized to charge any fee deficiency, or credit any overpayment, to Deposit Account No. 50-1170.

Respectfully submitted,



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5. **SUMMARY OF CLAIMED SUBJECT MATTER**

The present application calls for, in claim 1, a triangulated mobile gantry crane (20) that includes first, second, and third booms, (22, 24, 26) each of which has a vertical axis and comprises 1) a mobile base (50) that is independently supported on the ground and that is rotatable about the vertical axis to steer the crane (20) and 2) a lift leg (52, 52a) that is extendible about the vertical axis, that is supported on said base (50), and that has an upper end. U.S. Patent Application Ser. No. 10/080,982 filed February 22, 2002; pg. 7, ll. 2-22; Figs. 1-3. The first boom (22) is positioned laterally between and longitudinally remote from said second and third (24, 26) booms, wherein first, second, and third horizontal lines interconnecting said first, second, and third booms (22, 24, 26) form an acute triangle. Id. at ll. 8-12; Figs. 1-3.

The gantry crane (20) of claim 1 includes a plurality of horizontal beams (28, 30, 32) that functionally interconnect said lift legs (52, 52a) and that are raisable with coordinated lifting of said first, second, and third booms (22, 24, 26) to lift a load from the ground. Id., pg. 10, l. 19 - pg. 11, l. 6; Figs. 1-3. Claim 1 further defines that at least one of the beams (28, 30, 32) is linearly extendible to increase the horizontal spacing between two of said booms (22, 24, 26). Id., pg. 11, ll. 6-20; Fig. 3.

Claim 1 further includes rigging that extends downwardly from the beams (28, 30, 32) and that is detachably coupleable to the load after the gantry crane (20) is transported to a position in which at least one of the beams (28, 30, 32) is located over the load, the rigging lifting the load from the ground upon subsequent extension of said booms (22, 24, 26) and that then being releasable from the load upon subsequent retraction of the said booms (22, 24, 26). Id., pg. 13, l. 23 - pg. 15, l. 2.

Another aspect of the claimed invention, as reflected in claim 2, further defines a gantry (20) that includes first, second, and third booms (22, 24, 26) which each have a vertical axis. Id., pg. 7, ll. 2-7; Figs. 1-3. Gantry (20) is further defined as comprising 1) a mobile base (50, 50a) that is independently supported on the ground and that is rotatable about the vertical axis to steer the crane (20), and 2) a lift leg (52, 52a) that is supported on said base (50, 50a), that is extendible along the vertical axis, and that has an upper end, said first boom (22) being positioned laterally between and longitudinally remote from said second and third booms (24, 26). Id., pg. 8, l. 11 - pg. 9, l. 6; pg. 9, ll. 11-21; Figs. 1-6.

Claim 2 further defines that gantry (20) includes a plurality of horizontal beams (28, 30, 32) that functionally interconnect said lift legs (52, 52a) and that are raisable with coordinated lifting of said first, second, and third booms (22, 24, 26) to lift a load from the ground. Id., pg. 13, l. 21 - pg. 14, l. 11. At least one of the beams (28, 30, 32) is linearly extendible to increase the horizontal spacing between two of said booms (22, 24, 26) and wherein said beams (28, 30, 32) include first, second, and third beams functionally interconnecting said upper ends of said lift legs (52, 52a) to form an at least essentially triangular shape when viewed in top plan. Id., pg. 10, l. 19 - pg. 11, l. 20; Figs. 1-3.

Claim 2 further requires gantry (20) be operable with rigging that extends downwardly from the beams (28, 30, 32) and that is detachably coupleable to a load after the gantry crane (20) is transported to a position in which at least one of the beams (28, 30, 32) is located over the load. Id., pg. 13, l. 21 - pg. 15, l. 2. It is further disclosed that the rigging lifts the load from the ground upon subsequent extension of said booms (22,

24, 26) and is then releasable from the load upon subsequent retraction of the said booms (22, 24, 26). Id.

Claim 3 defines a further aspect of the claimed invention as including a triangulated mobile gantry crane (20) that has first, second, and third booms (22, 24, 26). Id. Each boom (22, 24, 26) is further defined as having a vertical axis and comprising 1) a mobile base (50, 50a) that is independently supported on the ground and that is rotatable about the vertical axis to steer the crane (20) and 2) a vertically extendible lift leg (52, 52a) that is supported on said base (50, 50a) that is extendible along the vertical axis and has an upper end. Id., pg. 8, l.11 - pg. 9, l. 6; pg. 9, ll. 11-21; Figs. 1-6. The first boom (22) is further defined as being positioned laterally between and longitudinally remote from the second and third booms (24, 26). Id.

Gantry (20) of claim 3 includes a plurality of horizontal beams (28, 30, 32) that functionally interconnect said lift legs (52, 52a). Id., pg. 10, l. 19 - pg. 11, l. 20; Figs. 1-3. Beams (28, 30, 32) are further defined as including first (28), second (30), and third beams (32) functionally interconnecting said upper ends of said lift legs (52, 52a) to form an at least essentially triangular shape when viewed in top plan. Id. First and second beams (28, 30) are further defined as extendible to increase the spacing between said first and second booms (22, 24) and said first and third booms (22, 26), respectively. Id., pg. 11, ll. 7-20; Fig. 2.

The gantry (20) claim 3 includes rigging that extends downwardly from the beams (28, 30, 32) and that is detachably coupleable to a load after the gantry crane (20) is transported to a position in which at least one of the beams (28, 30, 32) is located over the load. Id., pg. 13, l. 21 - pg. 15, l. 2. It is further disclosed that the rigging lifts the load

from the ground upon subsequent extension of said booms (22, 24, 26) and is then releasable from the load upon subsequent retraction of the said booms (22, 24, 26). Id.

Claim 7 defines another aspect of the claimed invention that includes a mobile gantry crane (20) that has first, second, and third booms (22, 24, 26). Id., pg. 7, ll. 2-7; Figs. 1-3. Each boom (22, 24, 26) is further defined as being oriented about a vertical axis and including 1) a mobile base (50, 50a) that is independently supported on the ground and that is rotatable about the vertical axis to steer the crane (20) and 2) a lift leg (52, 52a) that is supported on said base (50, 50a) that is extendible along the vertical axis, and that has an upper end. Id., pg. 8, l. 11 - pg. 9, l. 6; pg. 9, ll. 11-21; Figs. 1-6. The first boom (22) is further described as being positioned laterally between and longitudinally remote from said second and third booms (24, 26) of mobile gantry crane (20). Id.

Claim 7 further defines that gantry (20) includes a plurality of horizontal beams (28, 30, 32) that functionally interconnect said lift legs (52, 52a) and that are raisable with coordinated lifting of said first, second, and third booms (22, 24, 26) to lift a load from the ground. Id., pg. 13, l. 21 - pg. 14, l. 11. At least one of the beams (28, 30, 32) is linearly extendible to increase the horizontal spacing between two of said booms (22, 24, 26) and wherein said beams (28, 30, 32) include first, second, and third beams functionally interconnecting said upper ends of said lift legs (52, 52a) to form an at least essentially triangular shape when viewed in top plan. Id., pg. 10, l. 19 - pg. 11, l. 20; Figs. 1-3.

Claim 7 further requires gantry (20) be operable with rigging that extends downwardly from the beams (28, 30, 32) and that is detachably coupleable to a load after

the gantry crane (20) is transported to a position in which at least one of the beams (28, 30, 32) is located over the load. Id., pg. 13, l. 21 - pg. 15, l. 2. It is further disclosed that the rigging lifts the load from the ground upon subsequent extension of said booms (22, 24, 26) and is then releasable from the load upon subsequent retraction of the said booms (22, 24, 26). Id.

Claim 13 defines a further aspect of the claimed invention as including a triangulated mobile gantry crane (20) that has first, second, and third booms (22, 24, 26), each of which extends along a vertical axis and comprises 1) a mobile base (50, 50a) that is independently supported on the ground and 2) a vertically extendible lift leg (52, 52a) that is supported on said base (50, 50a) and that is extendible along the vertical axis, and that has an upper end. Id., pg. 8, l. 11 - pg. 9, l. 6; pg. 9, ll.11-21; Figs. 1-6. The mobile base (50, 50a) is further defined as being rotatable about the vertical axis of the respective boom (22, 24, 26) through an angle of at least 360° with respect to said lift leg (52, 52a) to steer said gantry crane (20). Id., pg. 9, l. 11 – pg. 10, l. 12; Figs. 1-6.

Claim 13 further defines the first boom (22) as a front boom positioned at a lateral centerline of said gantry crane (20). Id., pg. 10, ll. 13-18; Fig. 2. The second and third booms (24, 26) are further defined as rear booms positioned on opposite sides of said lateral centerline. Id., pg. 7, ll. 17-22; Figs. 2-3. Claim 13 further defines the geometric association of booms (22, 24, 26) via first, second, and third horizontal lines that interconnect the first, second, and third booms (22, 24, 26) in the form of an acute triangle. Id., pg. 7, ll. 2-22; Figs. 2-3.

Claim 13 further recites first and second lift beams (28, 30) that functionally interconnect the lift legs (52, 52a) of said first and second booms (22, 24) and said first

and third booms (22, 26), respectively. Id.; Figs. 2-3. This aspect of the invention further recites a rear cross beam (32) functionally interconnecting the lift legs (52, 52a) of the second and third booms (22, 26) to one another and wherein the first and second lift beams (28, 30) are raisable with coordinated lifting of said first, second, and third booms (22, 24, 26) to lift a load. Id., pg. 13, l. 21 - pg. 15, l. 2; Figs. 2-3. At least one of the beams (28, 30, 32) is further defined as being linearly extendible to increase the horizontal spacing between two of said booms (28, 30, 32). Id., pg. 12, l. 17 - pg. 13, l. 18; Figs. 2-3.

Claim 13 further recites rigging that extends downwardly from the beams (28, 30, 32) and that is detachably coupleable to a load after the gantry crane (20) is transported to a position in which at least one of the beams (28, 30, 32) is located over the load. Id., pg. 13, l. 21 - pg. 15, l. 2. It is further disclosed that the rigging lifts the load from the ground upon subsequent extension of said booms (22, 24, 26) and is then releasable from the load upon subsequent retraction of the said booms (22, 24, 26). Id.

Claim 14 recites another aspect of the claimed invention. As called for therein, this aspect of the claimed invention includes a triangulated mobile gantry crane (20) that has first, second, and third booms (22, 24, 26), each of which extends along a vertical axis and comprises 1) a mobile base (50, 50a) that is independently supported on the ground and 2) a vertically extendible lift leg (52, 52a) that is supported on said base (50, 50a) and that is extendible along the vertical axis, and that has an upper end. Id., pg. 8, l. 11 - pg. 9 l. 7; pg. 9, ll. 11-21; Figs. 1-6. The mobile base (50, 50a) is further defined as being rotatable about the vertical axis of the respective boom (22, 24, 26) through an

angle of at least 360° with respect to said lift leg (52, 52a) to steer said gantry crane (20). Id., pg. 9, l. 11 - pg 10, l. 12; Figs. 1-6.

Claim 14 further defines the first boom (22) as a front boom positioned at a lateral centerline of said gantry crane (20). Id., pg. 10, ll. 13-19; Fig. 2. The second and third booms (24, 26) are further defined as rear booms positioned on opposite sides of said lateral centerline. Id., pg. 7, ll. 17-22; Figs. 2-3. Claim 14 further defines the geometric association of booms (22, 24, 26) via first, second, and third horizontal lines that interconnect the first, second, and third booms (22, 24, 26) forming an acute triangle. Id., pg. 7, ll. 2-22; Figs. 2-3.

Claim 14 further recites first and second horizontal lift beams (28, 30) that functionally interconnect the lift legs (52, 52a) of said first and third booms (22, 26) and said second and third booms (24, 26), respectively. Id. Claim 14 calls for a rear horizontal cross beam (32) functionally interconnecting the lift legs (52, 52a) of the second and third booms (22, 26) to one another and wherein the first and second lift beams (28, 30) are extendible to increase the spacing between the first and second booms (22, 26) and the second and third booms (24, 26), respectively. Id., pg. 13, l. 21 - pg. 15 l. 2; Figs. 2-3.

Claim 14 of present invention further recites that the first and second lift beams (28, 30) further comprise a single inner tube (54, 54a) positioned at least generally centrally of said beam (28, 30) and a first outer tube (56, 56a) extending from said inner tube (54, 54a) to the lift leg (52, 52a) of said first boom (22). Id., pg. 8, l. 11 - pg. 9, l. 10; Figs. 1 and 4. A second outer tube extends from said inner tube (54, 54a) to the lift leg (52, 52a) of the associated one of said second and third booms (24, 26) such that each

of said outer tubes (56a) being extendible and retractable relative to said inner tube (54, 54a). Id.

Claim 14 further recites rigging that extends downwardly from the beams (28, 30, 32) and that is detachably coupleable to a load after the gantry crane (20) is transported to a position in which at least one of the beams (28, 30, 32) is located over the load. Id., pg. 13, l. 21 - pg. 15, l. 2. It is further called for that the rigging lifts the load from the ground upon subsequent extension of said booms (22, 24, 26) and is then releasable from the load upon subsequent retraction of the said booms (22, 24, 26). Id.

Claim 16 of the present invention defines a includes a triangulated mobile gantry crane (20) that has first, second, and third booms (22, 24, 26), each of which extends along a vertical axis and comprises 1) a mobile base (50, 50a) that is independently supported on the ground and 2) a vertically extendible lift leg (52, 52a) that is supported on said base (50, 50a) and that is extendible along the vertical axis, and that has an upper end. Id., pg. 8, l. 11 - pg. 9, l. 6; pg. 9, ll. 11-21; Figs. 1-6. The mobile base (50, 50a) is further defined as being rotatable about the vertical axis of the respective boom (22, 24, 26) through an angle of at least 360° with respect to said lift leg (52, 52a) to steer said gantry crane (20). Id., pg. 9, l. 11 - pg. 10, l. 12; Figs. 1-6.

Claim 16 further defines the first boom (22) as a front boom positioned at a lateral centerline of said gantry crane (20). Id., pg. 10, ll. 13-18; Fig. 2. The second and third booms (24, 26) are further defined as rear booms positioned on opposite sides of said lateral centerline. Id., pg. 7, ll.17-22; Figs. 2-3. Claim 16 further defines the geometric association of booms (22, 24, 26) via first, second, and third horizontal lines that

interconnect the first, second, and third booms (22, 24, 26) forming an acute triangle. Id., pg. 7, ll. 2-22; Figs. 2-3.

Claim 16 further recites first and second horizontal lift beams (28, 30) that functionally interconnect the lift legs (52, 52a) of said first and third booms (22, 26) and said second and third booms (24, 26), respectively. Id., Figs. 2-3. Claim 16 calls for a rear horizontal cross beam (32) functionally interconnecting the lift legs (52, 52a) of the second and third booms (22, 26) to one another and wherein the rear cross beam includes a hydraulic cylinder (114) extending between first and second lift beams (28, 30) and operatively connectable to each of the first and second lift beams at multiple discrete mounting locations (110a, 110b, 110c). Id., pg. 11, l. 21 - pg. 13, l. 19; Figs.2-3.

Claim 16 further recites rigging that extends downwardly from the beams (28, 30, 32) and that is detachably coupleable to a load after the gantry crane (20) is transported to a position in which at least one of the beams (28, 30, 32) is located over the load. Id., pg. 13, l. 21 - pg. 15, l. 2. It is further called for that the rigging lifts the load from the ground upon subsequent extension of said booms (22, 24, 26) and is then releasable from the load upon subsequent retraction of the said booms (22, 24, 26). Id.

Claim 17 defines a method that includes moving a mobile triangulated gantry crane (20) over a load by straddling said load with an open front end of said gantry crane (20) and positioning said load longitudinally between said open front end and a closed rear end. Id., pg. 7, ll. 2-12; pg. 13, l. 21 - pg. 14, l. 11. Said rear end of said gantry crane (20) is further defined as comprising a first boom (22) positioned laterally between and longitudinally remote from second and third booms (24, 26). Id. Each boom (22, 24, 26) is further defined as extending along a respective vertical axis, wherein first, second,

and third horizontal lines interconnecting said first, second, and third booms (22, 24, 26) form an acute triangle. Id., pg. 7, ll. 8-12; Figs. 1-3.

The method of claim 17 includes, after moving of gantry crane (20) coupling at least one of first, second, and third horizontal beams (28, 30, 32) to said load, said first, second, and third horizontal beams (28, 30, 32) functionally interconnecting said first, second, and third booms (22, 24, 26) to one another. Id., pg. 7, ll. 2-12; pg. 13, l. 21 - pg. 14, l. 11. The method includes then extending said first, second, and third booms (22, 24, 26) along the respective vertical axes in a coordinated manner to raise said first, second, and third horizontal beams (28, 30, 32) and to lift said load. Id. Claim 17 includes linearly horizontally extending at least one of said beams (28, 30, 32) to increase the horizontal spacing between two of the booms (22, 24, 26). Id., pg. 3, ll. 14-21.

Claim 18 of invention defines a method that includes moving a mobile triangulated gantry crane (20) over a load by straddling said load with an open front end of said gantry crane (20) and positioning said load longitudinally between said open front end and a closed rear end. Id., pg. 7, ll. 2-12; pg. 13, l. 21 - pg. 14, l. 11. Said rear end of said gantry crane (20) is further defined as comprising a first boom (22) positioned laterally between and longitudinally remote from second and third booms (24, 26). Id. Each boom (22, 24, 26) is further defined as extending along a respective vertical axis, wherein first, second, and third horizontal lines interconnecting said first, second, and third booms (22, 24, 26) form an acute triangle. Id., pg. 7, ll. 8-12; Figs. 1-3.

The method of claim 18 includes, after moving of gantry crane (20), coupling at least one of first, second, and third horizontal beams (28, 30, 32) to said load, said first, second, and third horizontal beams (28, 30, 32) functionally interconnecting said first,

second, and third booms (22, 24, 26) to one another. Id., pg. 7, ll. 2-12; pg. 13, l. 21 - pg. 14, l. 11. The method includes then extending said first, second, and third booms (22, 24, 26) along the respective vertical axes to lift said load. Id. Claim 18 includes extending the third beam (32) prior to the moving step to increase the spacing between the second and third booms (24, 26) sufficiently to permit a rear end of said gantry crane (2) to straddle said load. Id., pg. 3, ll. 14-21.

Claim 21 of the invention calls for a triangulated mobile gantry crane (20) having boom assembly consisting of first, second, and third horizontally spaced booms (22, 24, 26), each of which extends along a vertical axis and comprises 1) a mobile base (50) that is independently supported on the ground and 2) a lift leg (52, 52a) that is supported on said base (50), that is extendible along the vertical axis, and that has an upper end. Id., pg. 7, ll. 2-22; Figs. 1-3. Claim 21 further defines first boom (22) as being positioned laterally between and longitudinally remote from said second and third booms (24, 26). Id., pg. 7, ll. 8-12; Figs. 1-3.

Claim 21 further recites a plurality of horizontal beams (28, 30, 32) that functionally interconnect said lift legs (52, 52a) and that are raisable with coordinated lifting of said first, second, and third booms (22, 24, 26) to lift a load, and wherein at least one of the beams (28, 30, 32) is linearly extendible to increase the horizontal spacing between two of said booms (22, 24, 26). Id., pg. 10, l. 19 - pg. 11, l. 20; Figs. 1-3.

Claim 21 further calls for rigging that extends downwardly from the beams (28, 30, 32) and that is detachably coupleable to a load after the gantry crane (20) is transported to a position in which at least one of the beams (28, 30, 32) is located over the

load, the rigging lifting the load from the ground upon subsequent extension of said booms (22, 24, 26) and that then being releasable from the load upon subsequent retraction of the said booms (22, 24, 26). Id., pg. 13, l. 21 - pg. 15, l. 2.